#### CALIFORNIA COASTAL COMMISSION

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Filed: 8/23/00 49th Day: 10/11/00 180th Day: 2/19/01 Staff: BP-SD Staff Report: 9/21/00 Hearing Date: 10/10-13/00

# <u>REGULAR CALENDAR</u> STAFF REPORT AND PRELIMINARY RECOMMENDATION

Application No.: 6-00-111

Applicant: Cabrillo Power I LLC Agent: Hofman Associates

Description: Dredge approximately 366,000 cubic yards of lagoon bottom (sand) within

the outer basin of Agua Hedionda Lagoon and deposit it on three Carlsbad Beach locations previously approved by the Commission. Approximately 100,000 cubic yards of sand would be placed on the beach north of the ocean entrance to the lagoon (North Beach). The remaining dredged material would be placed on Middle and South Beaches. The applicant also proposes issuance of a 10-year permit to (1) allow a dredge of up to 1,868,000 cubic yards of lagoon bottom within the outer basin of Agua Hedionda Lagoon over a ten year period; (2) allow dredge of up to 500,000 cubic yards in any single event (dredge cycle); (3) a dredging period of September 15 to April 15 for the life of the permit, with the option of extending the dredge period to April 30, if approved in consultation with the Corps of Engineers, Department of Fish and Game and the National

Marine Fisheries Service.

Site: Outer basin (east of Hwy.101 and west of railroad) of Agua Hedionda

Lagoon, and Carlsbad State Beach, Carlsbad, San Diego County.

Substantive File Documents: Certified Agua Hedionda Land Use Plan; CDP #F 5536

(1977), CDP No. 6-93-193-A and CDP No. 6-93-193-A2, CDP No. 6-97-45,

CDP No. 6-97-46, CDP No. 6-97-83

#### **STAFF NOTES:**

#### Summary of Staff's Preliminary Recommendation:

Staff is recommending approval of the applicant's request to allow the maintenance dredging and beach deposition subject to several special conditions. However, staff is recommending that the dredge be for a one-time only occurrence and not for multiple dredges over a 10-year period. Because of possible changes to local environmental conditions which could affect shoreline processes (El Nino, severe winter storms, beach

nourishment on the Carlsbad shoreline from other projects, invasive algae that has been found in the lagoon), the Commission finds it is most appropriate to review and approve every individual dredge cycle for a suitable sand deposition site.

# I. PRELIMINARY STAFF RECOMMENDATION:

The staff recommends the Commission adopt the following resolution:

<u>MOTION</u>: I move that the Commission approve Coastal Development Permit No. 6-00-111 pursuant to the staff recommendation.

#### STAFF RECOMMENDATION OF APPROVAL:

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

# **RESOLUTION TO APPROVE THE PERMIT:**

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

#### II. Standard Conditions.

See attached page.

# III. Special Conditions.

- 1. <u>Timing of Dredging and Beach Deposition</u>. Prior to the issuance of the coastal development permit, the applicant shall submit to the Executive Director for review and written approval, the following:
  - a. <u>Pre-and-Post Dredge Requirements</u>. At least two weeks prior to dredging and within 60 days of completion of the proposed dredge cycle, the applicant shall submit to the Executive Director for review and written approval the following:

- 1. A map of pre-dredge conditions of the outer lagoon and pre- and postdeposition profiles at the approved beach deposition locations; proposed dredge quantities; deposition plan and methodology; and signage plan; and
- 2. Evidence the Corps of Engineers has approved the proposed dredge spoils as suitable for deposition at the approved beach locations, pursuant to ACOE Permit #95-20135.
- b. <u>Public Access/Timing</u>. Placement of sand on area beaches shall occur outside of the summer season (Memorial Day through Labor Day of any year).
- c. <u>Sensitive Species/Timing</u>. To avoid potential impacts to the California least tern breeding period and the grunion spawning period, dredging can occur between September 15 and April 15 with the option of extending the dredge period to April 30 if approved in writing by the Executive Director in consultation with the Army Corps of Engineers (COE) and California Department of Fish and Game (DFG). Beach disposition after March 1 of any year shall occur only if done consistent with a Grunion protection plan detailed in Special Condition #4.
- 2. <u>Eelgrass Mitigation and Monitoring</u>. Prior to the issuance of the coastal development permit, the applicant shall submit an eelgrass mitigation and monitoring plan that includes at a minimum the following:
  - a. Performance of a pre-construction eelgrass survey of the project area by qualified biologist immediately prior to the proposed maintenance dredging in order to establish the location of all eelgrass habitat.
  - b. Marking the location of all eelgrass habitat found in the pre-construction survey in order that the contractor can avoid impacting these areas during the proposed maintenance dredging. No anchorage of dredging equipment is permitted outside the limits of the dredging operation.
  - c. Performance of a post-construction eelgrass survey of the project area by qualified personnel no more than 30 days after the completion of the work to determine if any eelgrass habitat was impacted by dredging activities.
  - d. Performance of mitigation if it is determined by the post-construction eelgrass survey that there has been a loss of eelgrass habitat. This mitigation would be performed in accordance with and subject to the requirements of the Southern California Eelgrass Mitigation Policy (1:1.2 ratio). The applicant shall consult with the Executive Director prior to construction to determine if an additional coastal development permit or amendment is required for any necessary mitigation.

e. Monitoring reports associated with the experimental eelgrass restoration area shall be submitted to the Executive Director within 30 days of completion of the documents.

The permittee shall undertake the development in accordance with the approved plans. Any proposed changes to the approved plans shall be reported to the Executive Director. No changes to the plans shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

- 3. Monitoring/Beach Profiles. Prior to the placement of any material at the Middle Beach, South Beach or North Beach, the applicant shall prepare two profiles of the beach and off shore area (to closure or wading depth, consistent with the survey requirements of the ACOE permit) showing the pre-disposal conditions. Profiles shall be taken at the same locations after completion of the disposal, one month after disposal, and annually thereafter until the area either returns to its pre-disposal condition or is further modified by additional nourishment. Reports shall be provided to the Executive Director following the one-month after disposal profiles and after each annual survey which provide information on site conditions and an analysis of the long-term changes in sediment supply between the jetties.
- 4. <u>Grunion Protection Plan</u>. During any beach deposition which occurs in the period from September 15 to April 15, the permittee shall comply with the provisions of the grunion protection plan as required by ACOE Permit #95-20135.
- 5. <u>Invasive Species.</u> Prior to the commencement of dredging, the applicant shall provide evidence that dredging of the outer lagoon can occur without the risk of spreading the invasive green alga, *Caulerpa taxifolia*, within Agua Hedionda Lagoon to other coastal locations.
- 6. <u>Term of Permit</u>. This coastal development permit authorizes one time only dredging of approximately 366,000 cubic yards of sand from the outer lagoon and disposal to occur at the Middle, South and North Beaches within the approved disposal limits. No extension of the permit expiration date or additional dredge cycles beyond the 2000-2001 cycle is approved.

# IV. Findings and Declarations.

The Commission finds and declares as follows:

1. <u>Detailed Project Description/Purpose</u>. The applicant proposes to dredge approximately 366,000 cubic yards of lagoon bottom (sand) within the outer basin of Agua Hedionda Lagoon. and deposit it on three Carlsbad Beach locations previously approved by the Commission. Approximately 100,000 cubic yards of sand would be placed on the beach north of the ocean entrance to the lagoon (North Beach). The remaining dredged material would be placed on Middle and South Beaches. The

applicant also proposes issuance of a 10-year permit to (1) allow a dredge of up to 1,868,000 cubic yards of lagoon bottom within the outer basin of Agua Hedionda Lagoon over a ten year period; (2) allow dredge of up to 500,000 cubic yards in any single event (dredge cycle); (3) a dredging period of September 15 to April 15 for the life of the permit, with the option of extending the dredge period to April 30, if approved in consultation with the Corps of Engineers, Department of Fish and Game and the National Marine Fisheries Service.

The dredged material will be removed from the lagoon bottom within a pre-defined dredge limit area, as established by the ACOE permit to allow for protection of eelgrass resources. The dredged slurry would be pumped through a floating 20-inch diameter pipeline. For delivery of dredged material to the north, the pipe would float on the lagoon under the Carlsbad Blvd. Bridge and would connect to above ground, temporary pipes that would be placed along the beach. For south disposal, the pipe would float on the outer lagoon and connect to existing underground pipes under Carlsbad Blvd. Bulldozers and front end loaders would then spread the sand on the beaches to the following approximate dimensions: from 50 to 200 feet wide and up to 8 feet deep. Temporary dikes and berms would be used to de-water the slurry. Equipment and material staging would occur on the north and west shore of the outer lagoon and along the State Beach.

The outer Agua Hedionda Lagoon was originally dredged in 1954 as part of the construction for the Encina Power Station and has been subject to routine maintenance dredging since that time. The dredgings are performed to remove sediment, transported into the lagoon by tidal action through the existing jetty structure (ocean entrance to lagoon). The dredging allow for the retention of the original cooling water prism required to provide the Encina Power Station with an adequate volume of seawater. The powerplant is located on the south shore of the outer basin of Agua Hedionda Lagoon, within a few hundred yards of the Pacific Ocean.

Historically, the City of Carlsbad had required that much of the dredged sand be placed north as opportunistic beach fill. While the former power plant owner complied with this requirement, historically they had resisted putting sand on the beach north of Agua Hedionda Lagoon inlet because certain studies had shown that most of the sand ends up right back in the lagoon. Thus, the result of putting dredged sand north of the inlet was viewed by the former power plant owner as an increase in the overall annual maintenance dredging burden. Additionally, the implementation of the SANDAG Regional Beach Sand project slated to begin in Spring 2001 is projected to further increase sedimentation of the lagoon, as noted in the SANDAG FEIR. The applicant notes that any additional sand put into the littoral system north of the lagoon will have a direct impact on the lagoon sedimentation rate resulting in an increased dredging requirement for Cabrillo Power.

To address this concern, the Commission required the previous owner of the Encina Power Plant to pay for an independent study to assess sediment transport conditions in the area of the Agua Hedionda Lagoon. The purpose of the study was to provide a scientific basis for addressing the ongoing issue of where to put the sand dredged from the lagoon. In October 1999, the report commissioned by the Coastal Commission and prepared by Dr. Hany Elwany of Coastal Environments was presented to the Coastal Commission. Dr. Elwany's report entitled "Study of Sediment Transport Conditions in the Vicinity of the Agua Hedionda Lagoon", was accepted into the record as complying with the Commission's previous direction regarding future dredging permits.

Dr. Elwany's report looked at average historical sedimentation rates and conditions in and around the lagoon. The report states "...Approximately 80% of the sand trapped inside the lagoon is deposited from the southward sand transport and 20% from northward sand transport...." These findings are based on historical averages. The report goes on to state "...The evaluation of sand-placement options provides the following results: 1) to replenish sand removed by the power plant about 80% of the dredged sand should be placed on Middle and South Beach, and 20% on North beach; 2) to minimize the need for re-dredging, the sand should be placed as far from the intake channel as possible...Therefore, for sand placement on North Beach, a 2,000-ft buffer is recommended...." However, the report recommends that 30% of the sand dredged from Agua Hedionda Lagoon be placed on North Beach, near Pine avenue and 70% be placed on Middle and South Beaches." The finding that 20% of the sand be placed north, is therefore, based on a scientific understanding of sediment transport conditions while the 30% figure represents "... a reasonable compromise between the competing needs for the sand, benefits and costs, and environmental constraints."

The applicant proposes with this application to comply with the findings of Dr. Elwany's report and cooperate with the City of Carlsbad to allow maintenance dredging to occur in the fall of this year. To this end, the applicant proposes to put 30% of the sand north of the intake jetty. However, the applicant indicates it would prefer to commit to placing 20% of sand on North Beach, during each dredge event, because this number is based on a scientific understanding of sediment transport conditions within the vicinity of the lagoon. Nonetheless, the applicant proposes to place the dredged spoils consistent with the recommendations contained in the Elwany report as follows: 100,000 cubic yards of dredged material would be placed on North Beach (between Oak Street and Cherry Street); with the remainder (approximately 40%) being placed on Middle Beach (beach between intake and outfall jetties); and 30% on South Beach (south of outfall jetties).

The standard of review is Chapter 3 policies of the Coastal Act with the certified Agua Hedionda Land Use Plan used as guidance.

2. <u>Permit History</u>. The Coastal Commission has approved dredging of Agua Hedionda Lagoon in association with the needs of the existing power plant dredging program and modifications to it over the years (CDP #F 5536, CDP No. 6-93-193-A and CDP No. 6-93-193-A2, CDP No. 6-97-45, CDP No. 6-97-46, CDP No. 6-97-83). In the later decisions, there has been a dispute between the former applicant SDG&E and the City of Carlsbad as to whether or not a portion of the dredged spoils should be placed north of the intake jetty, on the City beach served by the Tamarack parking lot and the

improved access facilities associated with the Carlsbad seawall. A brief permit history follows:

CDP #F5536 (1977) permitted the applicant to annually deposit dredged sand from the lagoon's outer basin onto Carlsbad State Beach, immediately adjacent to the facility to the west. It was replaced by CDP #6-93-193 in March, 1994.

In CDP #6-93-193 and amendments, the Commission approved (3/17/94) the applicant's request to modify the boundary of the approved dredge disposal limit associated with the applicant's beach nourishment program to extend north of the lagoon to Oak Street; to allow dredge of 130,000 to 150,000 cubic yards of sand on an annual basis from October 1 to April 15 or at 30 month intervals for five years through February 3, 1997; and amended the approved maintenance provisions as they relate to the operation of the Encina Generating Station.

In CDP #6-97-45 (August, 1997) the Commission approved the dredging of approximately 200,000 cubic yards of sand from the outer basin of Agua Hedionda Lagoon. The Commission approved the dredged spoils to be placed on "Middle Beach". SDG&E had proposed to put the sand on the "South Beach". The Commission found the Middle Beach deposition location would provide a greater recreational benefit to beach users along the Carlsbad shoreline because it is the most heavily attended beach in Carlsbad and has supporting parking facilities, public walkways and lifeguard service, while the South beach provides less beach use and support facilities. The City of Carlsbad proposed that sand should be placed on the "North Beach". Based on conflicting opinions of shoreline experts and the lack of definitive studies that corroborated either the City's or the applicant's position, the Commission found that the sand should be placed where it would provide the most recreational benefit to coastal visitors--the Middle Beach. This area accommodates the greatest beach patronage along the Carlsbad shoreline. The Commission found that the public access and recreation policies of the Coastal Act and certified Agua Hedionda LUP seek to maximize public recreation and access opportunities at shoreline locations and the project would further that end. Absent the findings of the previously mentioned sand transport study, the Commission again found in CDP #6-97-46 (November 1997) that the dredged spoils should be placed on the Middle Beach for the same reasons it cited in CDP #6-97-45. Project studies indicated an additional 57,000 cu.yds. could be easily be accommodated on the Middle Beach. At the hearing, the Commission expressed a desire to see material from future dredging placed north of the power plant intake jetty on the North Beach.

In light of the differing opinions where the sand should be placed, the Commission required the permittee to complete a study to determine the effects of the power plant on sand transport and erosion rates within the vicinity of Aqua Hedionda Lagoon to be used for future decision-making on future dredging projects. The study was to enable the Commission to determine where beach quality material dredged from Aqua Hedionda Lagoon by SDG&E should be placed in the future, in order to replenish those beaches most affected by the operation of the power plant

In CDP #6-97-83, the Commission approved up to 797,000 cubic yards of dredging within the inner and outer basins of Agua Hedionda Lagoon. Approximately 341,000 yards of beach quality sand resulting from the inner lagoon dredging was approved to be placed on the Middle Beach and 150,000 cubic yards resulting from the outer lagoon dredging was approved be placed on the North Beach, directly north of the Middle Beach and continuing to Oak Street, about 1 mile. The remaining 306,000 yards of material was approved to be buried and capped within a "borrow pit" in the inner lagoon. SDG&E requested the permit application for dredging of the inner and outer lagoon be scheduled prior to their obtaining the results of the study to keep their dredging operation on schedule and not jeopardize funding, but also to address the Commission's stated concerns regarding the need to increase the tidal prism of the entire lagoon. Absent the findings of the study, the Commission again approved the dredged spoils from the inner lagoon be placed on the middle beach where it could be easily accommodated.

Additionally, the Commission approved that the dredged spoils from the outer lagoon be placed on the North Beach as SDG&E had the capability to deliver the sand there from the outer lagoon. The Commission found that sand placement on North Beach, which is served by a parking lot and numerous public access points, would provide a clear recreational benefit for coastal visitors. In the same action, the Commission denied the applicant's request to receive a 5-year approval to perform maintenance dredging. The Commission found absent the findings of the sand transport study and due to other concerns, any subsequent dredge cycles should be subject to a separate coastal development permit to assure its consistency with Coastal Act policies and involve coordination with the Corps of Engineers, City of Carlsbad and State Parks to determine the appropriate disposal site(s) for the future.

3. <u>Beach Replenishment/Public Access</u>. The subject proposal involves dredging the outer basin of Agua Hedionda lagoon, including placement of dredged spoils on the adjacent Carlsbad State Beach. There are several provisions of the Coastal Act, which are applicable to the proposed project, which encourage use of suitable material to supply the region's littoral zones with sand. Such deposition of beach quality material on the region's shoreline will create and protect coastal recreational areas for use by the general public, consistent with Coastal Act policies as follows:

Coastal Act Section 30233 addresses, among other things, the dredging of open coastal waters and placement, within the littoral zone, of dredged spoils and states, in part:

- (a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:
- (l) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.

- (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.
- (3) In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) of Section 30411, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland. The size of the wetland area used for boating facilities, including berthing space, turning basins, necessary navigation channels, and any necessary support service facilities, shall not exceed 25 percent of the degraded wetland.
- (4) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.
- (5) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

[...]

(b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable long shore current systems.

The above language in Section 30233 clearly suggests the benefit of restoring the region's beaches through use of material that would otherwise reach the shoreline, but for man's intervention by development and flood control projects. Therefore, the Commission finds when dredge material is compatible with and suitable for use as beach sand along the region's shoreline; it should be transported to the shoreline for such use, consistent with the public access and recreation policies of the Act.

In addition, Section 30233 also limits dredging and fills of open coastal waters and wetlands to specific permitted uses. The proposed dredging will occur within open coastal waters. In this particular case, the Commission is approving the project as a permitted use as it is maintenance dredging for an incidental public service purpose. As identified in the remainder of this report, the Commission also finds the project can be found as the least environmentally damaging alternative and that project impacts have been mitigated as also required in Section 30233.

The San Diego Association of Governments (SANDAG) has adopted the Shoreline Preservation Strategy (Strategy) for the San Diego region and is currently working on techniques towards its implementation. The shoreline is recognized as a valuable asset to

the environment and economy of the San Diego region and the State. It is also considered a resource of national significance. The Strategy identifies that beaches in the San Diego area have been steadily eroding for the past decade, and increasing beach loss and property damage have been projected for the future. The Strategy also emphasizes beach replenishment to preserve and enhance the environmental quality, recreational capacity, and property protection benefits of the region's shoreline. Additional sand on the region's beaches will increase the amount of available recreational area for public use, and decrease the rate of beach erosion, thereby reducing pressure to construct shoreline protective devices, which can adversely affect both the visual quality of scenic coastal areas and shoreline sand supply. Currently, SANDAG is finalizing a project to dredge sand from several offshore borrow sites and place approximately 2 million cubic yards of clean beach quality sand on up to 13 receiver sites in the San Diego region. The receiver sites are located from Oceanside in the north to Imperial Beach in the south.

Section 30604(c) of the Act requires that a specific access finding be made in conjunction with any development located between the nearest public road and the sea to assure conformance with the public access recreation policies of the Coastal Act. Many other provisions of the Coastal Act also address public access and recreation, including the following:

### Section 30210

In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

#### Section 30212.5

Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.

Providing as much sandy beach area as possible for use by the public is consistent with the intent of Sections 30210 and 30212.5 which require that public access and recreational opportunities be maximized in order to protect any one natural resource area, i.e. shoreline or park, from overuse. Providing additional recreational area, through placement of sand along a useable shoreline, will result in less crowding and provide an alternative to existing resource areas which are highly utilized by the public due to the availability of sand.

# Section 30213

Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred....

# Section 30220

Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

Providing additional useable beach area is providing a lower cost visitor and public recreational facility. When it is feasible for dredge projects that involve excavation of large volumes of beach suitable material to deposit the dredged material on the region's beaches, such activity is consistent with Section 30213 of the Act. Creation of additional coastal areas, such as beaches, suited for water-oriented recreational activities, is also consistent with Section 30220.

As noted, the dredging of the outer basin has been conducted since 1954 when the generating station was constructed. Additionally, a dredging and beach replenishment plan has been successfully operated since 1954 to provide sand to Carlsbad beaches and as such is a tremendous public benefit. The beach replenishment plan has been developed in consultation with the City of Carlsbad, COE, the California Department of Fish and Game (DFG), the Regional Water Quality Control Board, and the Environmental Protection Agency and is an example of a proactive effort between public and private interests serving both local and regional recreational needs.

As noted, the Commission commissioned and approved the findings of the "Study of Sediment Transport Conditions in the Vicinity of the Agua Hedionda Lagoon", which looked at average historical sedimentation rates and conditions in and around the lagoon. The proposed project complies with the findings of the report. Cabrillo Power has agreed to put 30% of the sand north of the intake jetty. However, the applicant notes that any additional sand put into the littoral system north of the lagoon will have a direct impact on the lagoon sedimentation rate resulting in an increased dredging requirement for Cabrillo Power. Thus, based in part on consultation with the City of Carlsbad and a review of the recommendations contained in the Elwany report, the applicant proposes to place the dredge spoils as proposed. The Commission accepts this portion of the applicant's request based on its compliance with the sand transport study and the recommendations of the City of Carlsbad.

Special Condition #1 require that the applicant prepare a final map of pre-dredge conditions of the lagoon and pre- and post- deposition profiles at the approved beach deposition locations. The deposition profiles will provide a record of how existing and proposed beach profiles have changed and will be used to place sand in areas where it will be retained the longest. Also required is an accounting of proposed dredge quantities; a deposition plan and methodology; and a signage plan to ensure that coastal

visitors will be made aware of the project and its boundaries. Deposition of sand is prohibited during the peak summer season. Therefore, as conditioned, the Commission can find the proposed project is consistent with the public access and recreation policies and habitat protection provisions of the Coastal Act and the Agua Hedionda LUP.

The proposed outer lagoon dredged material has been tested for grain size, total organic carbon, bulk sediment chemistry and compliance with State water quality standards by the Army Corps of Engineers. Results indicate that all material proposed for beach or borrow pit discharge does not contain any contaminants at levels of concern or that would exceed State water quality standards. Therefore, the Commission finds the proposed project consistent with past Commission precedent regarding this resource and resource protection policies of the Coastal Act.

The Commission notes that the approved sand transport study provides guidance as to the location of future dredge disposals. However, the Commission cannot authorize approval for the applicant's request for more than the current dredge cycle. Because of possible changes to local environmental conditions which could affect shoreline processes (El Nino, severe winter storms, beach nourishment on the Carlsbad shoreline from other projects), the Commission finds it is most appropriate to review and approve every individual dredge cycle for a suitable sand deposition site. A current issue is the eradication program for the invasive green alga, *Caulerpa taxifolia*, which has been discovered within inner Agua Hedionda Lagoon. The Commission recently issued an emergency permit regarding the eradication program which included placement of tarps over the treated sectors and capping the areas to preclude regrowth. The Commission finds its continuing involvement in future dredges will assure that current issues associated with the maintenance dredging will be addressed in a timely way so that future projects can be found consistent with the provisions of the Coastal Act and Agua Hedionda LUP.

In this action, the Commission is requiring in Special Condition #5 that the applicant must provide evidence that dredging of the outer lagoon can occur without the risk of spreading the algae to other coastal locations. Special Condition #6 limits authorization of the proposed maintenance dredging to the proposed 366,000 cubic yards during the 2000/2001 dredge cycle. Future dredge and beach deposition will require review and approval by the Commission through a separate coastal development permit. Only as conditioned, can the Commission assure future beach replenishment efforts will meet the requirements of Chapter 3 of the Coastal Act.

4. <u>Sensitive Resources</u>. Sections 30233 and 30240 of the Coastal Act provide for the protection, preservation and enhancement of coastal wetlands and species that depend on those wetlands as habitat. With respect to dredging of the outer lagoon, the time of year during which the dredging can occur is restricted by a number of resource agency approvals. These restrictions assure there are no adverse impacts to the California least tern breeding period and the grunion spawning period. The COE 404 permit allows dredging between September 15 and December 7, 2000, outside the sensitive breeding seasons with the option of extending the dredge period to April 30 if approved in

consultation with the California Department of Fish and Game (DFG) and the National Marine Fisheries Service. On several occasions the COE has allowed dredging to extend until April 30, finding by field inspection that the time extension would not adversely impact either the least term or grunion breeding seasons.

The outer basin of Agua Hedionda Lagoon also contains extensive eel grass beds, a protected resource under Coastal Act policies. Eel grass provides habitat for many fish and invertebrates. Previous Commission approvals require the mapping of the existing eel grass beds prior to dredging and after dredging to determine any impacts from dredging. If any eelgrass impacts occur, the COE permit requires revegetation must be carried out at a ratio of 1.2 square feet of mitigation area for each square foot of area impacted, with the final location of the mitigation area to be verified by the National Marine Fisheries in conjunction with the Dept. of Fish and Game. The mitigation area is not subject to future dredging. Monitoring and maintenance of the revegetation effort is also required through the COE permit. Special Condition #2 addresses this concern and requires the applicant to perform pre-dredge surveys to determine the location of eel grass so that is can be avoided during dredging operations. This condition also requires post-dredging surveys to determine if any eel grass has been impacted and requires mitigation for such impacts at a ratio of 1.2:1. With the attached conditions, the Commission finds the proposed project consistent with past Commission precedent and the resource protection policies of the Coastal Act.

Regarding grunion impacts, the Commission is concerned that beach deposition of dredged materials could bury grunion eggs that are deposited at the South, Middle and North beaches during high tides during the spawning season. The eggs hatch from stimulation associated with the subsequent high tide and the fingerlings return to the ocean. According to the DFG's "Expected Grunion Runs" for 2001, runs will begin as early as March 14. Thus, the proposed beach deposition plan could have adverse impacts if sand is deposited over the eggs before they hatch. That is, sand could be deposited so high above the eggs that the tides could not reach the eggs to hatch them. However, the existing ACOE permit requires monitoring of expected grunion runs that are annually predicted by the CDFG during the sand discharge. If grunion are observed spawning, the ACOE requires that sand discharges cease in a buffer zone surrounding the spawning area and that the buffer zone remain in place until the next predicted grunion run to allow eggs to hatch, and surveys show that no subsequent spawning has occurred in the same area. Discharge into documented spawning areas may resume only after approval by the resource agencies. This will avoid impacts to grunion spawning and allow onshore discharge to continue in areas where spawning has not occurred. Special Condition #4 requires compliance with these provisions.

In summary, the proposed dredging operation is necessary to maintain necessary tidal prism in the outer lagoon to assure effective operation of the power plant. Similar dredge operation have occur over the years. With the attached special conditions, impacts on sensitive species will be reduced to the maximum extent feasible or avoided, consistent with Sections 30233 and 30240 of the Coastal Act.

5. <u>Local Coastal Planning</u>. Section 30604 (a) requires that a coastal development permit shall be issued only if the Commission finds that the permitted development will not prejudice the ability of the local government to prepare a Local Coastal Program (LCP) in conformity with the provisions of Chapter 3 of the Coastal Act. In this case, such a finding can be made.

The project area is zoned and planned in the certified Carlsbad LCP for Open Space and Recreation Uses. As conditioned, the proposed project is consistent with provisions of these designations and past Commission actions on the site. Additionally, Policy 3.3 of the Agua Hedionda LUP provides that maintenance dredging must be performed in a manner consistent with the applicable sections of the Coastal Act. All dredging activities must be permitted by the Army Corp of Engineers with review by appropriate agencies, including the Department of Fish and Game, U.S. Fish and Wildlife Service, etc. The project has been reviewed by the agencies and found to be consistent with their requirements. Therefore, approval of the project, as conditioned, is consistent with Chapter 3 policies of the Coastal Act and the resource protection policies of the certified Agua Hedionda LUP.

6. Consistency with the California Environmental Quality Act (CEQA). Section 13096 of the Commission's administrative regulations requires Commission approval of a coastal development permit or amendment to be supported by a finding showing the permit or permit amendment, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

The proposed project has been conditioned to be found consistent with the resource protection and recreation policies of the Coastal Act and the Carlsbad LCP. Mitigation measures will minimize all adverse environmental impacts. As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, is the least environmentally damaging feasible alternative and can be found consistent with the requirements of the Coastal Act to conform to CEQA.

# **STANDARD CONDITIONS:**

- 1. <u>Notice of Receipt and Acknowledgment</u>. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
- 2. <u>Expiration</u>. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development

- shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
- 3. <u>Interpretation</u>. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
- 4. <u>Assignment</u>. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
- 5. <u>Terms and Conditions Run with the Land</u>. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

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